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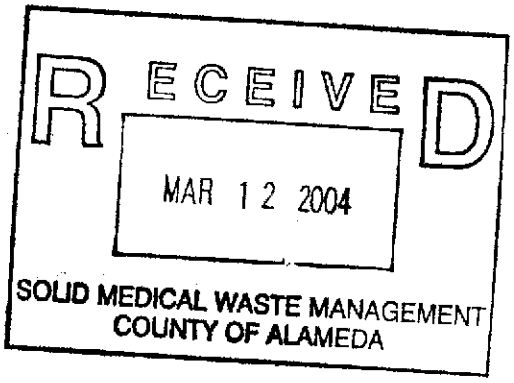
BLYMYER
ENGINEERS, INC.

March 8, 2004
BEI Job No. 94015



Ms. Eva Chu
Alameda County Health Care Services Agency
Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Modification of Remedial Action Plan**
Kawahara Nursery
16550 Ashland Avenue
San Lorenzo, California
Site # 4403

Dear Ms. Chu:

As previously discussed, Kawahara Nursery has identified investigation of, and likely removal of, the suspect magnetic anomalies and any impacted soil above remedial goals as the remedial option of choice at the subject site (Figures 1 and 2). It has been surmised that the magnetic anomalies may be, or may have been related to, underground storage tank(s) (USTs). It is also possible that the anomalies are simply fill soils associated with excavations of unknown origins. Selection of the remedial actions was based upon the apparent, relatively limited extent of petroleum hydrocarbon contamination in soil in the vicinity of the magnetic anomalies, and if related to a former fueling system, the likely abandonment of the system at a point in the past. As previously proposed, removal of soil present above concentrations considered unacceptable relative to human health risks was planned. At the time of the initial RAP (September 10, 2001; Blymyer Engineers), these remedial goals, or Site Specific Target Levels (SSTLs), were yet to be defined by a health risk assessment. Since that time an *ASTM RBCA Health Risk Assessment* has been conducted (October 11, 2002, Blymyer Engineers), which defined the remedial goals for petroleum hydrocarbons in soil and groundwater at the site. However, as we have previously discussed, with the promulgation of the San Francisco Bay Regional Water Qaulity Control Board's (RWQCB) Environmental Screening Levels (revised September 2003), lower nuisance concentrations for petroleum hydrocarbons were established, and the Alameda County Health Care Services Agency (ACHCSA) adopted a policy that requires these nuisance concentrations be observed in remedial actions.

This change in policy reopens the need for remedial action at the former southern diesel UST (Figure 3). The nuisance concentration goal for Total Petroleum Hydrocarbons (TPH) as diesel is 100 mg/kg in locations where groundwater is considered to be a potential drinking water resource. The confirmation soil sample (sample SE) collected on the eastern edge of the UST excavation yielded a concentration of 5,000 milligrams per kilogram (mg/kg) of TPH as diesel and 1.8 mg/kg total xylenes (Table I). Soil bore SB-1 detected 130 mg/kg of TPH as diesel and 4.1 mg/kg TPH as gasoline at a depth of 17 feet below grade surface (bgs). No other contaminants were detected at these locations. Due to the elevated concentration of diesel present in soil sample SE, the lack of a significant zone of contaminated soil in proximity to the dispenser documented by bore SB-1, and the lack of sheen on groundwater encountered in bore SB-1, it is suspected that the concentration of

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diesel in soil sample SE is representative of a small fresh spill of diesel related to removal of the UST (i.e. spillage from the piping), rather than a sample of representative concentrations in soil that derive from other sources (i.e. leaks from the piping). This is additionally suggested by the relatively low concentration of TPH in the stockpile characterization sample from the eastern end of the UST excavation. Typically stockpile concentrations are elevated relatively to underlaying soil concentrations in leaks and spills from piping. Based on the close proximity of confirmation sample SE to the location of soil bore SB-1, it is suspected that at worst, a small wedge of hydrocarbon impacted soil may not have been accessible for overexcavation at the time of the removal of the UST due to the immediately adjacent structures.

Based on the location of the former diesel UST and soil bore SB-1, remedial action by excavation is clearly not possible without undermining the barn. The UST excavation undermined the footing at the southern edge of the nursery office, and was up against the adjacent barn structure to the east, while soil bore SB-1 was within 3 to 5 feet of the structural corner post of the barn, and the former fuel dispenser island. As a consequence, Blymyer Engineers proposes that a Soil Management Plan be developed and accompanied with a deed notification for the residual concentrations at this former UST location. At the time the property is redeveloped, appropriate additional actions can be taken.

Kawahara Nursery is in the process of obtaining estimates for remedial actions, and would like to submit a cost estimate to the UST Cleanup Fund shortly. Kawahara Nursery would appreciate an expedited response to this modification to remedial actions in order to incorporate these actions into the submittal.

Should have any questions, please call Mark Detterman at (510) 521-3773.

Sincerely,

By: _____
Mark E. Detterman, C.E.G. 1788
Senior Geologist

REGISTERED GEOLOGIST
MARK E. DETTERMAN
No. 1788
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA
E.G. 9/05

And: _____
Michael S. Lewis
Vice President, Technical Services

Enclosures:
Figure 1: Site Location Map
Figure 2: Site Plan
Figure 3: Detailed Map of UST Excavation Area
Table I: Results of UST Closure Soil Sample Analysis

c. Mr. John Kawahara, Kawahara Nursery

Table I, Results of UST Closure Soil Sample Analysis
BEI Job No. 94015, Kawahara Nursery, Inc.
16550 Ashland Avenue, San Lorenzo, California

Sample ID	Sample Date	Modified EPA Method 8015 (mg/kg)		EPA Method 8020 (μg/kg)				
		TPH as Gas	TPH as Diesel	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes
SE*	12/01/92	NA	**5,000**	NA	<130	<99	<130	**1,800**
ST-1*	12/01/92	NA	**210**	NA	<5	6.7[1]	<5	<15
ST-2*	12/01/92	NA	<1	NA	<5	6.7[1]	<5	<15
SW*	12/01/92	NA	<1	NA	<5	9.5[1]	<5	<15

Notes:

TPH = Total petroleum hydrocarbons
EPA = Environmental Protection Agency
<x = Not detected above the analytical method reporting limit of x
mg/kg = Milligrams per kilogram
μg/kg = Micrograms per kilogram
NA = Not analyzed
* = Collected by Tank Protect Engineering
[1] = Method blank contained 7.9 μg/kg toluene. All other analytes were non detect at good limits of detection.

Results in **bold** indicate detectable concentrations.

UNITED STATES GEOLOGICAL SURVEY 7.5' QUADS. "SAN LEANDRO, CA" AND "HAYWARD, CA" BOTH ED. 1959 . PHOTOREVISED 1980.

BLYMYER ENGINEERS, INC.

BEI JOB NO. 94015

DATE 4-9-99

0 1000 2000

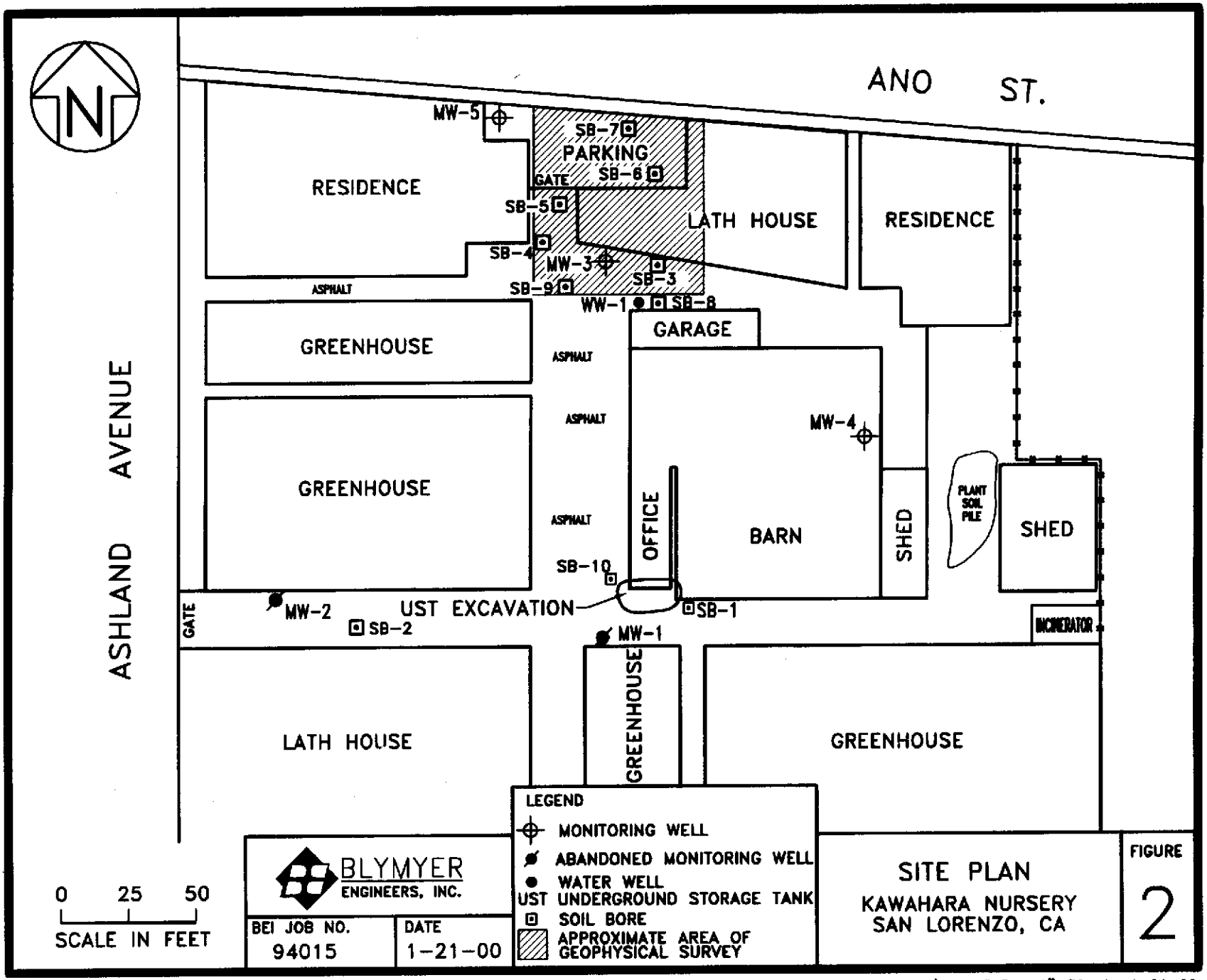
SCALE IN FEET

N

SITE LOCATION MAP

KAWAHARA NURSERY
16550 ASHLAND AVE.
SAN LORENZO, CA

FIGURE 1



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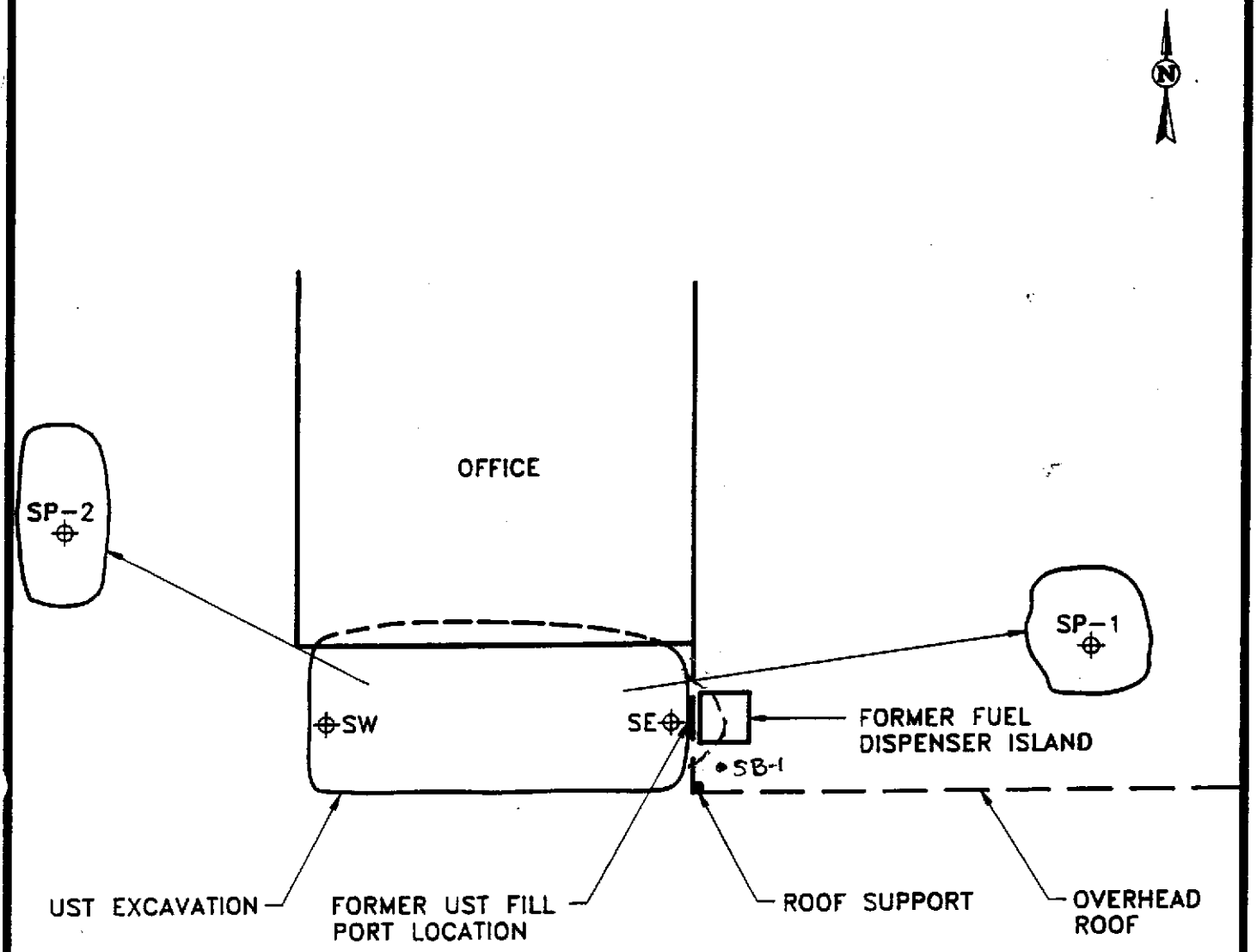

LEGEND

⊕ = SOIL SAMPLE LOCATION
UST = UNDERGROUND STORAGE TANK

BLYMYER ENGINEERS, INC. (BEI)

BEI DWG NO: 93071F13

DATE: 7/23/93

0 10' 20'

SCALE: 1" = 10'

DETAILED MAP OF UST EXCAVATION AREA

KAWAHARA NURSERY
SAN LORENZO, CA

FIGURE 3

93071F13/7-23-93/GW